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Longitudinal Associations Between Adolescents' Bullying-Related Indirect
Defending, Outsider Behavior, and Peer-Group StatusJeroen Pronk  and Tjeert Olthof
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During adolescence, youth become more likely to avoid involvement in witnessed bullying and less likely to support victims. It is unknown whether—and how—these bystander behaviors (i.e., outsider behavior and indirect defending) are associated with adolescents' peer-group status (i.e., popularity and social acceptance) over time. Cross-lagged path modeling was used to examine these longitudinal associations in a sample of 313 Dutch adolescents ($M_{\text{age-T1}} = 10.3$ years). The results showed that status longitudinally predicted behavior, rather than that behavior predicted status. Specifically, unpopularity predicted outsider behavior and social acceptance predicted indirect defending. These findings suggest that a positive peer-group status can trigger adolescents' provictim stance. However, adolescents may also strategically avoid involvement in witnessed bullying to keep a low social profile.

Bullying can be conceptualized as the strategic and repeatedly executed, goal-directed harmful behavior of one or more perpetrators (the bully/bullies) toward one or more weaker individuals (the victim/victims; Salmivalli, 2010). Bullying occurs in a dynamic peer-group context in which one or more witnesses are present (Atlas & Pepler, 1998; Salmivalli, 2010). These witnesses can behave in ways that are either supportive of the bullying, supportive of the victim, or avoidant of the event. Within this context, bullying does not only have detrimental short- and long-term consequences for the physical and mental health of victims (Hawker & Boulton, 2000; Troop-Gordon, Rudolph, Sugimura, & Little, 2014), but can have a negative impact on witnessing individuals as well (Nishina & Juvonen, 2005).

The importance of the peer group and of peers' influence on adolescents' attitudes and behaviors increases as children move into adolescence (Dishion & Tipsord, 2011; Steinberg & Morris, 2001). At the same time, the prevalence of bullying increases

during this developmental period (Pellegrini & Long, 2002; Salmivalli, 2010; Salmivalli & Voeten, 2004). It is therefore important to focus on the classroom peer-group context if we want to counteract the detrimental effects of bullying. Research increasingly shows that the best way to reduce bullying is by activating the defender potential of those adolescents who have an antibullying attitude (Polanin, Espelage, & Pigott, 2012; Pozzoli & Gini, 2010; Pronk, Goossens, Olthof, De Mey, & Willemen, 2013; Salmivalli, 2010). Unfortunately, provictim attitudes and behaviors (i.e., defending) become less prevalent during the transition into adolescence, while at the same time avoiding involvement in witnessed victimization (i.e., outsider behavior) becomes more normative (Pozzoli, Gini, & Vieno, 2012). This study therefore focused on these two bystander behaviors—that is, on defending and outsider behavior—to increase our knowledge about their developmental patterns and to provide antibullying program developers with knowledge about how to promote peer defending in classrooms and schools.

Previous studies have increased our knowledge about concurrent correlates of defending and outsider behavior. Both behaviors have been related to

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necessary prerequisites for prosocial behavior in terms of personality (Pronk, Olthof, & Goossens, 2015), attitude (Olthof & Goossens, 2008), and cognition (Pronk et al., 2013). Peer-group status was found to positively moderate the concurrent associations between some of the prerequisites for prosocial behavior (i.e., defender self-efficacy and affective empathy) and actual defending (Pöyhönen, Juvonen, & Salmivalli, 2010). However, what is at present unknown is whether (1) high status makes adolescents more likely to defend victims, (2) defending helps adolescents to obtain high status, or (3) status and defending mutually predict each other positively over time. Clarity about the directionality of these associations is vital for the antibullying program strategies that will prove to be effective in activating adolescents' defender potential within the classroom peer-group context. If having a high peer-group status makes adolescents more likely to defend victims, antibullying programs need to include status-promoting strategies to activate their defender potential. However, if defending victims helps adolescents to obtain high status, this strategy will prove ineffective. Antibullying programs should then include strategies that will help to increase adolescents' competence and their social drives. This study therefore aimed at disentangling the developmental patterns of adolescents' defending and outsider behavior in association with their peer-group status.

The question of directionality in the longitudinal associations between behavior and status has been investigated previously. However, due to contradictory findings, these previous studies do not allow us to infer conclusions about the directionality of these associations. Moreover, these previous studies only investigated this question within the context of the development of adolescents' antisocial behavior. Specifically, Cillessen and Mayeux (2004) found that status predicts aggressive behavior rather than that aggressive behavior predicts status, while Reijntjes et al. (2013) suggest that bullying behavior predicts status rather than that status predicts bullying behavior. This study will therefore contribute to the existing literature in two ways. First, this study will add to the existing debate about the directionality in the longitudinal associations between behavior and status. Second, this study will extend this debate from the development of only adolescents' antisocial behavior in association with their peer-group status, to include also the development of adolescents' prosocial behavior in association with their peer-group status.

Defending and Outsider Behavior in the Bullying Dynamics

Peer defending can take the form of direct and/or indirect strategies (Pronk et al., 2013; Reijntjes et al., 2016). Direct defending constitutes all provictim interventions that directly end the bullying by stopping the bullies (e.g., telling or coercing the bullies to stop their behavior). Indirect defending constitutes all provictim interventions that do not directly end the bullying but that do help the victims (e.g., consoling and being nice to victims). This study focuses on indirect defending exclusively for three reasons. First, direct defending was found to be strongly present in the behavioral repertoire of probullying adolescents (Reijntjes et al., 2016) and was suggested to be used by adolescents in probullying cliques to help each other out (Huitsing, Snijders, Van Duijn, & Veenstra, 2014). This suggests that—at the very least—direct defending may be reserved for helping friends, rather than helping victims in general. Second, the negative effects of victimization on victims were found to be due to their inability to cope with its emotional consequences (Troop-Gordon et al., 2014). While direct defending may effectively end a bullying situation, indirect defending may be more beneficial to victims' mental health as it helps them to alleviate the negative feelings caused by victimization (Sainio, Veenstra, Huitsing, & Salmivalli, 2011). Third, outsiders were found to be willing and confident of their potential as indirect defenders, despite a lower general competence in bullying situations and in intervening in them (Pronk et al., 2013). This suggests that *if* those adolescents who show outsider behavior can be persuaded to start helping victims, they are more likely to use indirect defending strategies. Unfortunately, most previous studies did not differentiate between direct and indirect defending, but operationalized defending as a general construct. As such, it is unclear whether the previous findings will hold true for indirect defending specifically. This study will help to elucidate this.

Indirect Defending, Outsider Behavior, and Popularity

Within social groups, adolescents' behavior can be oriented toward obtaining and maintaining dominance, which results in being granted prime access to group resources (Hawley, 2003) and/or toward obtaining and maintaining prestige, which results in being granted the respect, admiration, and

sympathy of others (Henrich & Gil-White, 2001). Dominance—in this study operationalized as popularity, that is, social impact and visibility—can be obtained and maintained using coercive and/or prosocial strategies (i.e., using aggressive and/or tit-for-tat cooperative behaviors to further one's own peer-group position; Hawley, 2003). Within the bullying dynamics, bullies were found to most successfully combine these two strategies (Olthof, Goossens, Vermande, Aleva, & Van der Meulen, 2011). Specifically, bullies were found to aggress against outgroup members (i.e., victims), while supporting ingroup members (i.e., friends; Huitsing et al., 2014). As a result, bullying seems to strategically make adolescents more popular within their peer group (Olthof et al., 2011; Reijntjes et al., 2013).

It is unclear whether indirect defending may be used by adolescents with the same goal in mind. Indirect defenders were found to prefer prosocial strategies over coercive strategies (Olthof et al., 2011). Moreover, when compared with bullying, (indirect) defending is not associated with high popularity (Olthof et al., 2011; Pronk et al., 2017; Reijntjes et al., 2016; Sainio et al., 2011). However, indirect defending was associated with higher popularity levels than other bystander behaviors like outsider behavior (Olthof et al., 2011; Pronk et al., 2017). Unfortunately, these previous findings all come from concurrent reports.¹ It is therefore unknown whether and how indirect defending and popularity are associated longitudinally. It may well be that the previously found concurrent associations between indirect defending and popularity were caused by confounding factors, like the higher social skillfulness of adolescents who execute indirect defending behaviors versus those who show outsider behavior when witnessing bullying (e.g., Pronk et al., 2013). This study aims at filling this gap in the literature.

Outsider behavior was previously associated with low popularity compared with the other bullying role behaviors (Olthof et al., 2011; Pronk et al., 2017). Avoiding involvement in witnessed victimization (i.e., outsider behavior) is also unlikely to make someone popular within their peer group over time. In line with this, previous studies associated outsiders' behavioral profile with a low dominance ambition (Olthof et al., 2011) and their personality profile with social, emotional, and behavioral inhibition (Pronk

et al., 2015). Adolescents may thus avoid involvement in witnessed bullying (i.e., show outsider behavior) to keep a low social profile and adolescents who do not seek to become prominent in their classroom peer group may strategically use outsider behavior to keep a low social profile. It therefore seems most likely that outsider behavior and popularity will negatively influence each other over time.

Indirect Defending, Outsider Behavior, and Social Acceptance

With regard to prestige—in this study operationalized as social acceptance, that is likeability (see Cheng, Tracy, & Henrich, 2010)—defending and, to a lesser degree outsider behavior, have both been concurrently associated with high social acceptance (Goossens, Olthof, & Dekker, 2006; Pöyhönen & Salmivalli, 2008; Pronk et al., 2017; Reijntjes et al., 2016). It is unknown whether outsider behavior is concurrently associated with social acceptance because adolescents who show this behavior do sometimes help victims, do not harm others, and/or as a byproduct of other characteristics that they do possess (e.g., their prosocial personality; Pronk et al., 2015). However, it seems unlikely that outsider behavior and social acceptance are also longitudinally associated. Outsider behavior may well be associated with social acceptance merely because adolescents who show outsider behavior are agreeable individuals (Pronk et al., 2015) and their classmates enjoy their company. Longitudinal associations between outsider behavior and social acceptance are therefore not expected in this study.

It seems unlikely that indirect defending is also associated with social acceptance only because adolescents who indirectly defend victims are sociable, agreeable individuals (Pronk et al., 2015). It seems more likely that indirect defending and social acceptance mutually influence each other over time. Socially accepted adolescents have more friends and may therefore be more confident in their ability to help victims without being afraid of negative reactions from classmates and/or the risk of becoming victimized themselves. Moreover, socially accepted adolescents may also feel a stronger—moral or social—obligation to help their classmates and/or their larger network of classmate friends. In line with these suggestions, (indirect) defending has been associated with being competent at the social, emotional, and physical level (Pronk et al., 2013), with helping friends (Nishina & Bellmore, 2010; Oh & Hazler, 2009; Pronk et al., 2013), and with having a strong moral compass

¹Although Reijntjes et al.'s (2016) sample was followed up for 3 years, time was not included in their analyses and no longitudinal hypotheses were tested.

(Forsberg, Thornberg, & Samuelsson, 2014; Pronk, Olthof, & Goossens, 2016). It therefore seems likely that social acceptance positively predicts adolescents' indirect defending over time. However, at the same time, adolescents who indirectly defend victims may also be more socially accepted within their peer group because they execute prosocial behaviors that are helpful to others. We therefore expect mutuality in the longitudinal associations between indirect defending and social acceptance.

Present Study

In this study, a sample of Dutch fourth graders was followed until sixth grade—the final grade in Dutch primary schools—to investigate the longitudinal associations of their indirect defending and outsider behavior with their popularity and social acceptance status in the classroom. Unlike in some other countries (e.g., the United States), Dutch primary school students follow the same fixed curriculum as their classmates and classroom compositions do not (drastically) change throughout the primary school period. Dutch primary school students therefore spend most of their time at school interacting with the same group of classroom peers. Within this context, it was possible to investigate our research questions under peer-group stability in one of the most influential peer groups for Dutch adolescents.

The main aim of this study was to elucidate whether (1) adolescents' indirect defending and outsider behavior predict their peer-group status, (2) adolescents' peer-group status predicts their indirect defending and outsider behavior, or (3) adolescents' peer-group status and their indirect defending and outsider behavior mutually predict each other over time. Based on theory, it seems likely that status and behavior will mutually influence each other over time. Specifically, mutuality in these longitudinal associations is expected between outsider behavior and unpopularity, and between indirect defending and social acceptance. It is less clear-cut whether longitudinal associations can also be expected between indirect defending and popularity and it seems unlikely that longitudinal associations will be found between outsider behavior and social acceptance. Still, based on previous concurrent reports (e.g., Goossens et al., 2006; Olthof et al., 2011; Pöyhönen & Salmivalli, 2008; Pöyhönen et al., 2010; Pronk et al., 2017; Reijntjes et al., 2016; Sainio et al., 2011) these longitudinal associations are theoretically possible and are therefore included in the cross-lagged path models of this study.

This study aimed at investigating the development of (early) adolescents' indirect defending and outsider behavior in association with their peer-group status. However, gender differences favoring girls have been found for both indirect defending and outsider behavior (e.g., Goossens et al., 2006; Pronk et al., 2013; Sutton & Smith, 1999). Gender was therefore included in all analyses. In the preliminary analyses, gender was included to confirm the gender differences favoring girls for both behaviors with our data. In the main analyses, gender was included to investigate gender equality in the associations between status and behavior. The literature suggests that human social behavior—regardless of gender—is focused on procuring and preserving one's peer-group status position (Hawley, 2003; Henrich & Gil-White, 2001). The status correlates of indirect defending and outsider behavior should therefore be gender-equal.

METHOD

Participants

Data were collected in 19 Dutch primary school classrooms, with permission of the schools and classroom teachers. Participants were the fourth-grade subsample of Olthof et al. (2011), for whom data were also collected in fifth and sixth grade. In agreement with school preferences and internal review board guidelines, participants' parents were sent informed consent letters ($N = 410$). Parents could decline participation of their child by signing and returning a preprinted objection note in a stamped addressed envelope ($n = 16$; 4.0%). Participants were informed that they could decline their participation whenever they wanted ($n = 0$). At T1 data were available for 394 participants (48.7% boys; 84.3% Dutch ethnicity; $M_{\text{age-T1}} = 10.3$ years, $SD = 6$ months), ranging in socioeconomic status from working to upper middle class. Due to attrition (T2: $n = 22$; T3: $n = 34$) and procedural errors for social acceptance (T2: $n = 25$), the final sample consisted of 313 participants (47.3% boys). Attrition was mainly due to participants transitioning to schools not participating in this study. Participants with data at every time point did not significantly differ from those with missing data on any of the study measures.

Measures

Bullying role behavior. The Bullying Role Nomination Procedure (BRNP; Olthof et al., 2011) was used to measure participants' bullying role

behavior. The description of the BRNP will be limited to indirect defending and outsider behavior. The BRNP starts with a universal definition of bullying (stressing repetition, intention, and power imbalance; Salmivalli, 2010). Subsequently, participants could nominate classmates as outsider ("Some classmates do not want to have anything to do with bullying. They stay away from the bullying, pretend not to see what is going on, or do not take sides with either the bullies or the victim") and indirect defender ("Some classmates try to support and help classmates who are bullied. These classmates tell the victim not to care about what happened, or they console him/her afterwards, or during break time they treat him/her friendly, or they go to an adult to talk about the bullying"). Participants could nominate an unlimited number of classmates from a name list (no self-nominations).

Participants who received nominations for both behaviors were aggregated to ascertain reliable behavioral assessments (cf. Pellegrini, 2002). Specifically, final behavioral scores were calculated with corrections for unequal numbers of students across classrooms by dividing participants' received nominations by the total number of within-classroom nominators. In line with common procedures, all proportion scores were within-classroom Rankit normalized to correct for normality violations and to prevent class-related—nominator-related—variance from influencing the data analyses (Pronk et al., 2016; Salmivalli, Lappalainen, & Lagerspetz, 1998). Pronk et al. (2013) evidenced the validity of the BRNP measures for outsider and indirect defender. That is, BRNP-reported outsiders were found to lack competence in bullying situations and intervening in them, while BRNP-reported indirect defenders were found to be competent in bullying situations and intervening in them.

Popularity. Participants' popularity status was measured with a standard procedure. Participants completed two peer nominations to assess their perception of most and least popular classmates. Nomination procedures were similar to those used for the BRNP. In line with previous studies (e.g., LaFontana & Cillessen, 2002; Parkhurst & Hopmeyer, 1998), no popularity definition was provided. Final popularity scores were calculated as the within-classroom standardized difference of participants' within-classroom standardized nominations received for popular and unpopular (see also LaFontana & Cillessen, 2002; Olthof et al.,

2011). This standardization procedure corrected for unequal numbers of students across classrooms and prevented class-related—nominator-related—variance from influencing data analyses.

Social acceptance. Participants' social acceptance status was measured with the sociometric status rating procedure (Maassen, Akkermans, & van der Linden, 1996). Participants were presented a classmate name list and rated all their classmates on how much they (dis)liked them on a 7-point Likert scale ranging from -3 (*dislike very much*) through 3 (*like very much*). Final social acceptance scores were calculated as the average of all received ratings (range: -1 – 7).

Procedure

Data were collected as part of a large-scale longitudinal project which included other measures not used in this study. At every time point, participants were individually interviewed by a research assistant in a quiet room in their school. Research assistants were trained to follow a written research protocol as an assurance for consistent and correct data recording. Before the interviews started, participants were informed that their responses would be treated confidentially and anonymously. Participants were urged not to talk about the testing procedures or their answers with classmates.

RESULTS

Descriptive Statistics

Table 1 summarizes the means and standard deviations for all study measures and the outcomes of t tests investigating gender differences. Significant gender differences favoring girls were found at every time point for outsider behavior, indirect defending, and social acceptance. For popularity, no gender differences were found.

Table 2 summarizes the correlations between all study variables. Within time points (1) outsider behavior was negatively correlated with popularity and positively correlated with social acceptance (not significant at T3), (2) indirect defending was positively correlated with both popularity (only significant at T3) and social acceptance, and (3) outsider behavior and indirect defending were positively correlated, as were popularity and social acceptance. Across time points, similar correlation patterns and strong stability correlation coefficients were found.

TABLE 1
Descriptive Statistics for All Study Variables Including Gender Comparisons

	Total sample (N = 313)		Boys (n = 148)		Girls (n = 165)		Gender comparison	
	M	SD	M	SD	M	SD	t (311)	d
Outsider behavior (T1)	0.13	.14	0.08	0.12	0.17	.15	5.41	.61
Indirect defending (T1)	0.13	.12	0.09	0.10	0.16	.09	5.55	.63
Popularity (T1)	0.01	.97	0.05	1.05	-0.02	.90	0.64	.07
Social acceptance (T1)	4.68	.65	4.53	0.67	4.81	.59	3.96	.45
Outsider behavior (T2)	0.12	.14	0.07	0.10	0.17	.15	6.96	.79
Indirect defending (T2)	0.12	.12	0.08	0.09	0.16	.14	6.84	.78
Popularity (T2)	0.00	.97	0.06	1.04	-0.05	.90	1.04	.12
Social acceptance (T2)	4.81	.70	4.68	0.71	4.92	.67	3.17	.36
Outsider behavior (T3)	0.13	.18	0.08	0.14	0.17	.19	4.60	.52
Indirect defending (T3)	0.13	.13	0.08	0.09	0.18	.14	7.68	.87
Popularity (T3)	-0.02	.97	0.03	1.03	-0.07	.91	0.97	.11
Social acceptance (T3)	4.83	.65	4.75	0.67	4.90	.61	2.14	.24

Note. All bold gender comparisons were significant at $p < .05$.

Longitudinal Associations Between Status and Behavior

Cross-lagged path modeling analysis was used to investigate whether (1) popularity and social acceptance predict outsider behavior and indirect defending, (2) outsider behavior and indirect defending predict popularity and social acceptance, or (3) status and behavior predict each other reciprocally. Goodness of model fit was evaluated with the chi-square statistic (χ^2), the root mean square error of approximation (RMSEA), the standardized root mean square residuals (SRMR), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). The chi-square difference test ($\Delta\chi^2$) was used to enable between-model comparisons by testing

each model's contribution to model fit adjustment. Nonsignificance of the χ^2 , a CFI and TLI above 0.95, and a RMSEA and SRMR below 0.05 indicate a close model fit (Hu & Bentler, 1999). A CFI and TLI between 0.90 and 0.95, and a RMSEA and SRMR between 0.05 and 0.08, indicate acceptable model fit. Finally, significance of the $\Delta\chi^2$ indicates a contribution to model fit adjustment.

A full cross-lagged path model was run that included popularity, social acceptance, outsider behavior, and indirect defending at every time point (see Figure 1). Within time points, variable covariances were estimated. Across time points, (1) autoregressive paths were specified to estimate stability effects, and (2) cross-lagged paths were specified (i.e., status to behavior and behavior to status)

TABLE 2
Correlations Between All Study Variables (N = 313)

	01.	02.	03.	04.	05.	06.	07.	08.	09.	10.	11.	12.
01. Outsider behavior (T1)	—											
02. Indirect defending (T1)	.38	—										
03. Popularity (T1)	-.32	.09	—									
04. Social acceptance (T1)	.40	.39	.19	—								
05. Outsider behavior (T2)	.59	.25	-.34	.27	—							
06. Indirect defending (T2)	.32	.45	.09	.34	.26	—						
07. Popularity (T2)	-.29	.09	.81	.15	-.39	.10	—					
08. Social acceptance (T2)	.26	.35	.20	.61	.23	.32	.24	—				
09. Outsider behavior (T3)	.51	.15	-.44	.20	.61	.16	-.48	.09	—			
10. Indirect defending (T3)	.31	.50	.11	.38	.26	.57	.09	.39	.20	—		
11. Popularity (T3)	-.31	.09	.78	.14	-.40	.07	.84	.26	-.57	.14	—	
12. Social acceptance (T3)	.18	.29	.17	.48	.10	.26	.18	.62	.05	.35	.25	—

Note. All bold correlations were significant at $p < .05$.

to estimate transfer effects. This full model offered an acceptable to close data fit, $\chi^2 (20) = 37.45$, $p = .010$; RMSEA = 0.05; SRMR = 0.03; CFI = 0.99; TLI = 0.98.

The full model was simplified by removing non-significant paths (see also Figure 1): (1) the cross-lagged paths between indirect defending and popularity, (2) the cross-lagged paths from outsider behavior to social acceptance, (3) the cross-lagged path from outsider behavior at T1 to popularity at T2, (4) the cross-lagged path from indirect defending at T2 to social acceptance at T3, and (5) the cross-lagged path from social acceptance at T2 to outsider behavior at T3. The final model offered a close data fit, $\chi^2 (29) = 47.71$, $p = .016$; RMSEA = 0.04; SRMR = 0.04; CFI = 0.99; TLI = 0.98; and was more parsimonious without worsening model fit, $\Delta\chi^2 (9) = 10.26$, $p = .330$;

$\Delta\text{RMSEA} = 0.01$; $\Delta\text{SRMR} = -0.01$; $\Delta\text{CFI} = 0.00$; $\Delta\text{TLI} = 0.01$.

Finally, to investigate whether gender differentially influenced the associations between status and behavior, a multigroup model was run. Comparing the fit of a model that was parametrically equal across gender ($\chi^2 [97] = 143.70$, $p = .002$) with a model that was parametrically free across gender ($\chi^2 [78] = 118.78$, $p = .002$), suggested gender equality, $\Delta\chi^2 (10) = 24.92$, $p = .163$. Therefore, the final model without gender differences will be interpreted.

Within time point covariances of the final model were strongest at T1 and are summarized in Table 3: (1) outsider behavior was negatively associated with popularity and positively associated with social acceptance (not significant at T3), (2) indirect defending was positively associated with

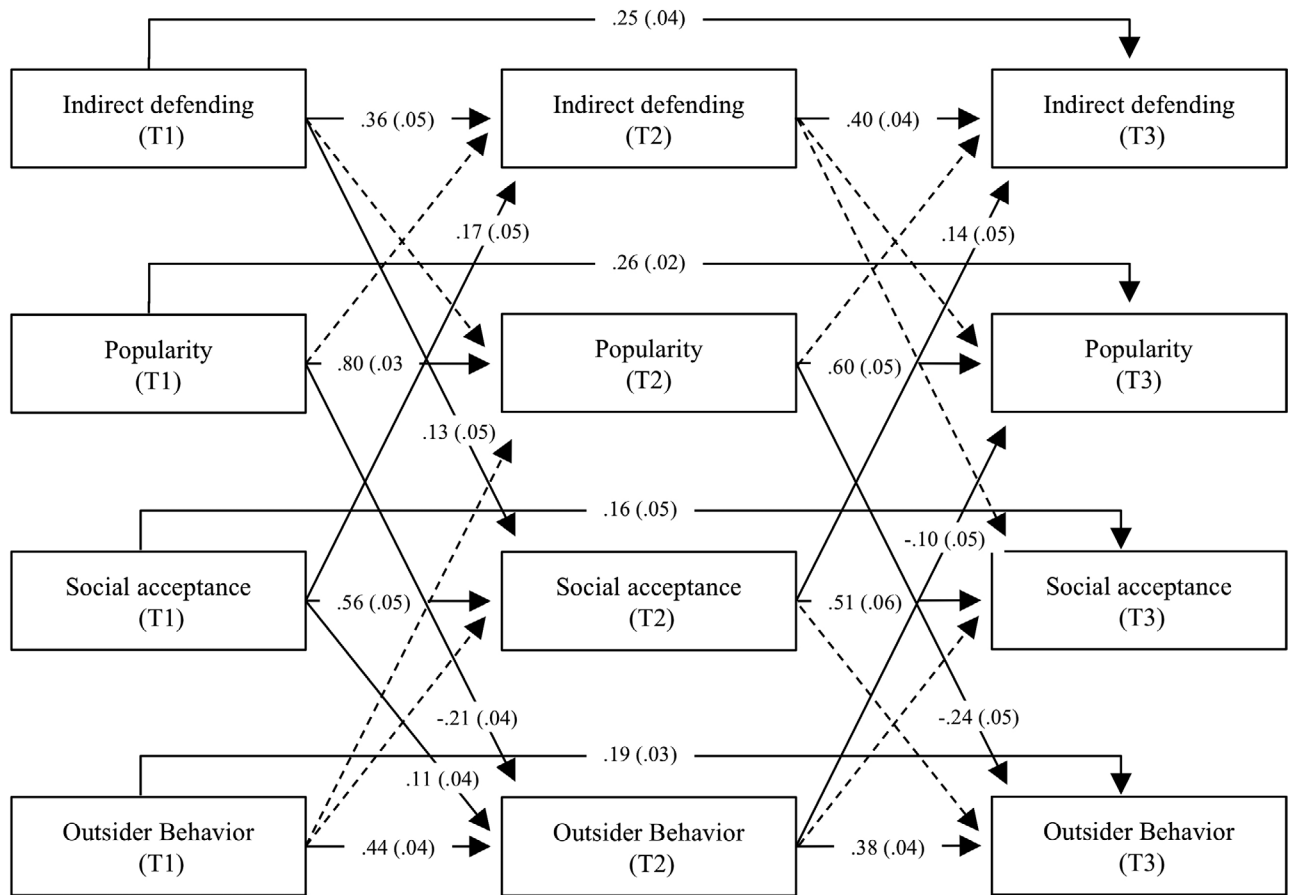


FIGURE 1 Conceptual cross-lagged path model with standardized path coefficients (SEs within parentheses) for the longitudinal associations between status (popularity and social acceptance) and behavior (indirect defending and outsider behavior). *Note.* The dashed black paths were not significant and removed from the model. All solid paths were significant at $p < .05$.

both popularity (only significant at T3) and social acceptance (only significant at T1), (3) outsider behavior and indirect defending were positively associated (only significant at T1), as were popularity and social acceptance.

Figure 1 summarizes the standardized coefficients of the final model. Medium to strong stability coefficients were found for all study measures. The following cross-lagged coefficients were also found: (1) popularity was negatively associated with outsider behavior across time points, while the reversed pattern was only found for outsider behavior at T2 to popularity at T3; (2) social acceptance was positively associated with indirect defending across time points, while the reversed pattern was only found for indirect defending at T1 to social acceptance at T2; and (3) social acceptance at T1 was positively associated with outsider behavior at T2.

DISCUSSION

During adolescence, bullying behaviors become more accepted and normative within classrooms (Pellegrini & Long, 2002; Salmivalli & Voeten, 2004) and adolescents become less likely to defend victims and more likely to show outsider behavior (Pozzoli et al., 2012). To counteract the detrimental consequences of bullying, we need to change this developmental pattern by promoting defending in classrooms. This study investigated whether—and how—adolescents' tendency to show outsider behavior and indirect defending are longitudinally associated with their peer-group status in terms of popularity and social acceptance: Does behavior

predict status, does status predict behavior, or do both reciprocally predict each other?

Indirect Defending, Social Acceptance, and Popularity

For indirect defending, the hypothesis that adolescents' behavior and their peer-group status mutually predict each other over time was not consistently supported by the data. Specifically, adolescents' indirect defending did not consistently predict their peer-group status longitudinally. While adolescents who were more inclined to indirectly defend victims in fourth grade were more socially accepted in fifth grade, this pattern was not replicated from fifth- to sixth grade. However, peer-group status did consistently predict adolescents' indirect defending. Socially accepted fourth- and fifth graders were more likely to indirectly defend classmates in fifth and sixth grade.

Taken together, these findings extend previous concurrent reports about the positive association between indirect defending and social acceptance (Goossens et al., 2006; Pöyhönen & Salmivalli, 2008; Pronk et al., 2017; Reijntjes et al., 2016) by suggesting temporal order. Adolescents' peer-group status influenced their indirect defending behavior and socially accepted adolescents were more likely to indirectly defend victims. This finding suggests that being socially accepted increases adolescents' confidence and, as such, the likelihood that they will start to help victims. Consistent with this, (indirect) defending was previously related to self-efficacy in bullying situations and in intervening in them specifically (Pronk et al., 2013). Alternatively, it could also be that adolescents who are socially accepted have more friendship connections within their classrooms, which may be both the cause and effect of their socially accepted status position. Friends were previously found to be more likely to help each other when being victimized (Nishina & Bellmore, 2010; Oh & Hazler, 2009; Pronk et al., 2013). Socially accepted adolescents may thus be seen by their peers as showing more indirect defending behaviors simply because they support their victimized friends, of which they have a larger within-classroom network. Future studies are needed to test these hypotheses, as their implications for antibullying interventions are quite divergent. If indirect defending is consequential to competence, defending could be promoted in intervention programs. However, if indirect defending is actually a component of friendship and restricted to helping friends, intervention programs focusing

TABLE 3
Within Time Point Covariances of the Final Cross-Lagged Path Model ($N = 313$)

	T1		T2		T3	
	p	SE	p	SE	p	SE
Outsider behavior						
Indirect defending	.38	.05	.07	.03	.05	.03
Popularity	-.32	.05	-.10	.02	-.11	.02
Social acceptance	.39	.05	.08	.03	.01	.03
Indirect defending						
Popularity	.09	.05	.03	.03	.05	.02
Social acceptance	.39	.06	.07	.04	.05	.03
Popularity						
Social acceptance	.19	.06	.08	.03	.06	.02

Note. All bold standardized path coefficients were significant at $p < .05$.

on promoting defending behavior may not pay great dividends.

While defending and popularity have been positively associated concurrently to a certain extent (Pöyhönen et al., 2010; Pronk et al., 2017; Sainio et al., 2011), no longitudinal patterns were found in this study. This suggests that—as hypothesized—indirect defending is not an effective strategy for acquiring popularity in the peer group and that popularity does not increase the likelihood that adolescents will indirectly defend victims. Previously, Reijntjes et al. (2016) found that while both direct defending and hybrid—or combined direct and indirect—defending were associated with popularity, indirect defending by itself was not. This could indicate that direct defending specifically contributed to the concurrent associations between defending and popularity in previous studies. Of course, it could also be that the concurrent associations between defending and popularity are a consequence of—for example—the assertiveness and emotional skillfulness needed to execute these behaviors (Pöyhönen & Salmivalli, 2008; Pozzoli & Gini, 2010; Pronk et al., 2013). Future studies are needed to test these hypotheses.

Finally, indirect defending was found to be a stable behavior over time. Adolescents' tendency to indirectly defend victims thus seems to be determined—in part—by something other than a drive for status. The findings indicate that being socially accepted by peers made adolescents more likely to help victims by providing them support in alleviating the negative consequences of victimization. It is exactly this type of behavior which has been suggested to be most beneficial to victims (Sainio et al., 2011). Nevertheless, the data also point to a potential cyclical pattern between indirect defending and social acceptance. That is, fourth graders who indirectly defended victims were more socially accepted in fifth grade and were subsequently more likely to indirectly defend victims in sixth grade. While future studies with a more extensive longitudinal design are needed to further evidence this cyclical pattern, indirect defending may well be a behavioral strategy toward maintaining high levels of social acceptance within the peer group. If this indeed proves to be true, we might need to start teaching adolescents that they could earn themselves a positive peer-group status (i.e., prestige) without using dominance-oriented strategies like bullies do (i.e., coercion), and thus without being feared by classmates (cf., Henrich & Gil-White, 2001).

Outsider Behavior, Popularity, and Social Acceptance

For outsider behavior, the hypothesis that adolescents' behavior and their peer-group status mutually predict each other over time could also not be supported by the data. Specifically, outsider behavior did not consistently predict adolescents' peer-group status longitudinally. While adolescents who showed more outsider behavior in fifth grade were less popular in sixth grade, no precedent for this pattern was found from fourth to fifth grade. However, peer-group status did—again—consistently predict adolescents' outsider behavior. Popular fourth- and fifth-graders showed less outsider behavior in fifth and sixth grade.

Taken together, these findings extend previous concurrent reports about the negative association between outsider behavior and popularity (Olthof et al., 2011; Pöyhönen et al., 2010; Pronk et al., 2017) by suggesting temporal order. Adolescents' peer-group status predicted their tendency to show outsider behavior, rather than that their outsider behavior predicted their peer-group status. This suggests that it is not so much avoiding involvement in witnessed victimization which makes adolescents unpopular with classmates, but unpopularity which makes them more likely to avoid involvement in witnessed victimization. Previous studies have already indicated that adolescents who show outsider behavior resemble those who indirectly defend victims by having antibullying personalities (Pronk et al., 2015), attitudes (Olthof & Goossens, 2008), and cognitions (Pronk et al., 2013). The present findings suggest that these shared preconditions for prosocial behavior by themselves are not enough for adolescents to start defending victimized classmates. Outsiders—who are attitudinally prosocial adolescents—seem to need a certain popularity status to reduce their likelihood of avoiding involvement in witnessed victimization. At the same time, these types of adolescents seem to need a certain social acceptance status to increase their likelihood of helping their victimized peers. The present findings suggest that antibullying programs may need to start considering status-promoting strategies to ultimately activate outsiders' defender potential. One such strategy can be derived from Van den Berg and Cillessen (2015), who suggest that strategical classroom seating arrangements can positively influence adolescents' social acceptance and popularity status within the classroom peer group.

While outsider behavior and social acceptance have been positively associated concurrently (Goossens et al., 2006; Pöyhönen & Salmivalli, 2008; Pronk et al., 2017), no longitudinal associations were found in this study, with the exception of a weak positive association between fourth-grade social acceptance and fifth-grade outsider behavior. As such, the present findings suggest that—as hypothesized—the concurrent associations between outsider behavior and social acceptance are most likely a consequence of other characteristics that adolescents who show outsider behavior possess. Outsider behavior and social acceptance may well be concurrently associated because adolescents who show this behavior have a prosocial and emotionally stable personality (Pronk et al., 2015) and their classmates simply enjoy their company.

Finally, outsider behavior—like indirect defending—was found to be a quite stable behavior over time. This suggests that adolescents who show outsider behavior may not really care about having a high peer-group status position. Adolescents may actually use outsider behavior because of a preference of keeping a low social profile within the classroom, especially as helping victims might increase their social visibility. In line with this, the data of this study point to a potential cyclical pattern between unpopularity and outsider behavior. That is, unpopular fourth graders showed more outsider behavior in fifth grade and were subsequently less popular in sixth grade. While future studies are necessary to further evidence this cyclical pattern, it suggests that some adolescents may no longer strive for popularity. In fact, this finding brings forth the hypothesis that outsider behavior may well be a behavioral strategy toward peer-group invisibility. Consistent with this, Olthof et al. (2011) found that outsider behavior was associated with a lack of dominance ambition. This suggests that the key to activating outsiders' defender potential may lie in understanding why they desire to remain invisible within their peer group and in finding ways to work around these desires.

Developmental Considerations

Thus far, the consistency in the longitudinal associations between status and behavior in this study was interpreted as support for the hypothesis that status predicts behavior rather than that behavior predicts status. However, behavior did also partially predict adolescents' peer-group status. Specifically, indirect defending predicted social acceptance, but only from fourth to fifth grade. Moreover, outsider

behavior predicted unpopularity, but only from fifth to sixth grade. While it may indeed be that status predicts behavior rather than that behavior predicts status (cf. Cillessen & Mayeux, 2004), the lack of consistent longitudinal associations from behavior to status could also be a consequence of social processes related to the developmental period of adolescence.

During adolescence, peers increasingly influence the behaviors and attitudes of youth (Dishion & Tipsord, 2011; Steinberg & Morris, 2001). This increased peer influence coincides with an increased acceptance of bullying in the peer group (Pellegrini & Long, 2002; Salmivalli & Voeten, 2004). This increased harshness of the social (classroom) climate during adolescence, may well explain why indirect defending was no longer appreciated by peers from fifth to sixth grade in this study as well as why outsider behavior was still tolerated (i.e., did not negatively affect adolescents' popularity status) from fourth to fifth grade. It could be that the consensus by which social behaviors are acceptable within the peer group shifts during adolescence. This shift in appreciating indirect defending and outsider behavior during adolescence corresponds with a previously found shift in the associations of prosocial and antisocial behaviors with peer-group status during adolescence (Van den Berg, Burk, & Cillessen, 2015). During childhood, both aggression and prosocial behavior can help someone to obtain status in the peer group, but when children transition into adolescence the predictive power of prosocial behavior on peer-group status—most notably on popularity—disappears.

Taking this developmental shift into consideration within the context of this study, peers may start to view indirect defending as a childish behavior which does not correspond with the prevailing group norms. As a consequence, indirect defending will no longer earn adolescents the same status (i.e., social acceptance) as it did before. This developmental shift does not have to affect the longitudinal associations from social acceptance to indirect defending. That is, as indirect defending increases adolescents' visibility in the peer group, adolescents still need a safe peer-group position (e.g., a large friendship network) to be able to indirectly defend victims. Similarly, outsider behavior may no longer be viewed as an acceptable response to witnessed bullying by peers during adolescence and may start to negatively affect adolescents' peer-group status position (i.e., popularity). Again, this developmental shift does not have to affect the longitudinal

associations from unpopularity to outsider behavior. That is, adolescents who are unpopular in the peer group are more likely to strategically remove themselves from the social classroom dynamics. Future studies with more extensive longitudinal designs are needed to investigate this.

Weaknesses, Strengths, and Conclusions

Some weaknesses of this study need to be addressed. First, both behavior and status were assessed through peer reports, and shared method variance may have influenced the outcomes. Moreover, the classroom was used as the source of adolescents' peer reputation and the classroom peer group is not the only important peer group for adolescents. However, adolescents do spend a large quantity of their time interacting with their classmates (Dishion & Tipsord, 2011; Steinberg & Morris, 2001) and peer reports are based on the aggregated observations of these classmates (Pellegrini, 2002). This may hold specifically true for adolescents in Dutch primary schools, as Dutch primary school students follow the same fixed curriculum as their classmates and classroom compositions do not (drastically) change from year to year. Therefore, classroom-level peer reports were a reliable source for adolescents' peer-group status and observable behavior in our sample. Self-reports can be biased by social desirability in responding and teacher reports can be biased due to underreporting (Atlas & Pepler, 1998). Still, the conceptual overlap between social acceptance (i.e., being liked) and indirect defending (i.e., caring for and helping others), and between popularity (i.e., social impact and visibility) and outsider behavior (i.e., removing oneself from witnessed bullying situations) could have artificially inflated the associations found in this study between these constructs. Future studies with different informants for behavior could therefore strengthen and extend the present findings. Moreover, future studies that include other peer group sources (e.g., at grade or school level) are needed to strengthen the present findings.

Second, the data did not allow us to be conclusive about the longitudinal patterns between unpopularity and outsider behavior or between indirect defending and social acceptance. As explained above, social developmental processes taking place during (early) adolescence may have contributed to the lack of consistency in the longitudinal associations from behavior and status (vs. those from status to behavior). The present longitudinal design, does not allow us to be conclusive

about whether developmental processes have influenced these inconsistencies, or whether these inconsistencies are indicative of unidirectionality in the associations from status to behavior (c.f., Cillessen & Mayeux, 2004). Future studies with more extensive longitudinal designs, ranging from, for example, middle childhood through middle adolescence (i.e., starting at an earlier age and/or with more time points), could strengthen and extend the present findings.

Notwithstanding these weaknesses, this study was the first to investigate the longitudinal associations of adolescents' indirect defending and outsider behavior with their peer-group status in terms of both popularity and social acceptance. The findings of this study add to the existing debate about the directionality of the association between adolescents' status and behavior (see also Cillessen & Mayeux, 2004; Reijntjes et al., 2013) and extend this debate from a focus on only adolescents' antisocial behavioral development to also include adolescents' prosocial behavioral development. The findings suggest that—in line with Cillessen and Mayeux (2004)—peer-group status predicts adolescents' tendencies to show these behaviors, rather than their behavior predicts their peer-group status. These findings stress the importance of emphasizing within-classroom social processes to increase student connectedness and classroom cohesion in attempts to activate adolescents' active involvement in counteracting the negative consequences of victimization on victims. The present findings suggest that adolescents who are popular are less likely to avoid involvement in witnessed victimization and adolescents who are socially accepted by their classmates are more likely to take a provictim stance. Taken together, these findings suggest that enjoying a positive—dual—peer-group status could serve as a catalyst in activating attitudinally prosocial adolescents' defender potential. Moreover, the findings suggest that some adolescents may strategically use outsider behavior to keep a low social profile within their classroom.

REFERENCES

- Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, 92, 86–99. <https://doi.org/10.1080/00220679809597580>
- Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior*, 31, 334–347. <https://doi.org/10.1016/j.evolhumbehav.2010.02.004>

- Cillessen, A. H. N., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development, 75*, 147–163. <https://doi.org/10.1111/j.1467-8624.2004.00660.x>
- Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. *Annual Review of Psychology, 62*, 189–214. <https://doi.org/10.1146/annurev.psych.093008.100412>
- Forsberg, C., Thornberg, R., & Samuelsson, M. (2014). Bystanders to bullying: Fourth- to seventh-grade students' perspectives on their reactions. *Research Papers in Education, 29*, 557–576. <https://doi.org/10.1080/02671522.2013.878375>
- Goossens, F. A., Olthof, T., & Dekker, P. (2006). The new participant role scales: A comparison between various criteria for assigning roles and indications for their validity. *Aggressive Behavior, 32*, 343–357. <https://doi.org/10.1002/ab.20133>
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry, 41*, 441–455. <https://doi.org/10.1111/1469-7610.00629>
- Hawley, P. H. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted Machiavellian. *Merrill-Palmer Quarterly, 49*, 279–309. <https://doi.org/10.1353/mpq.2003.0013>
- Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior, 22*, 165–196. [https://doi.org/10.1016/S1090-5138\(00\)00071-4](https://doi.org/10.1016/S1090-5138(00)00071-4)
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*, 1–55. <https://doi.org/10.1080/10705519909540118>
- Huitsing, G., Snijders, T. A. B., Van Duijn, M. A. J., & Veenstra, R. (2014). Victims, bullies, and their defenders: A longitudinal study of the coevolution of positive and negative networks. *Development and Psychopathology, 26*, 645–659. <https://doi.org/10.1017/S0954579414000297>
- LaFontana, K. M., & Cillessen, A. H. N. (2002). Children's perceptions of popular and unpopular peers: A multimethod assessment. *Developmental Psychology, 38*, 635–647. <https://doi.org/10.1037/0012-1649.38.5.635>
- Maassen, G. H., Akkermans, W., & van der Linden, J. L. (1996). Two-dimensional sociometric status determination with rating scales. *Small Group Research, 27*, 56–78. <https://doi.org/10.1177/1046496496271003>
- Nishina, A., & Bellmore, A. (2010). When might peer aggression, victimization, and conflict have its largest impact? Microcontextual considerations. *Journal of Early Adolescence, 30*, 5–26. <https://doi.org/10.1177/0272431609350928>
- Nishina, A., & Juvonen, J. (2005). Daily reports of witnessing and experiencing peer harassment in middle school. *Child Development, 76*, 435–450. <https://doi.org/10.1111/j.1467-8624.2005.00855.x>
- Oh, I., & Hazler, R. J. (2009). Contributions of personal and situational factors to bystanders' reactions to school bullying. *School Psychology International, 30*, 291–310. <https://doi.org/10.1177/0143034309106499>
- Olthof, T., & Goossens, F. A. (2008). Bullying and the need to belong: Early adolescents' bullying-related behavior and the acceptance they desire and receive from particular classmates. *Social Development, 17*, 24–46. <https://doi.org/10.1111/j.1467-9507.2007.00413.x>
- Olthof, T., Goossens, F. A., Vermande, M. M., Aleva, E. A., & Van der Meulen, M. (2011). Bullying as strategic behavior: Relations with desired and acquired dominance in the peer group. *Journal of School Psychology, 49*, 339–359. <https://doi.org/10.1016/j.jsp.2011.03.003>
- Parkhurst, J. T., & Hopmeyer, A. (1998). Sociometric popularity and peer-perceived popularity: Two distinct dimensions of peer status. *Journal of Early Adolescence, 18*, 125–144. <https://doi.org/10.1177/0272431698018002001>
- Pellegrini, A. D. (2002). Affiliative and aggressive dimensions of dominance and possible functions during early adolescence. *Aggression and Violent Behavior, 7*, 21–31. [https://doi.org/10.1016/S1359-1789\(00\)00033-1](https://doi.org/10.1016/S1359-1789(00)00033-1)
- Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology, 20*, 259–280. <https://doi.org/10.1348/026151002166442>
- Polanin, J. R., Espelage, D. L., & Pigott, T. D. (2012). A meta-analysis of school-based bullying prevention programs' effects on bystander intervention behavior. *School Psychology Review, 41*, 47–65. Retrieved from ERIC database. (EJ977426)
- Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the victim of bullying? The interplay between personal and social factors. *Merrill-Palmer Quarterly, 56*, 143–163. <https://doi.org/10.1353/mpq.0.0046>
- Pöyhönen, V., & Salmivalli, C. (2008). New directions in research and practice addressing bullying: Focus on defending behavior. In D. J. Pepler & W. M. Craig (Eds.), *Understanding and addressing bullying: An international perspective* (pp. 26–43). Bloomington, IN: AuthorHouse.
- Pozzoli, T., & Gini, G. (2010). Active defending and passive bystanding behavior in bullying: The role of personal characteristics and perceived peer pressure. *Journal of Abnormal Child Psychology, 38*, 815–827. <https://doi.org/10.1007/s10802-010-939909>
- Pozzoli, T., Gini, G., & Vieno, A. (2012). The role of individual correlates and class norms in defending and passive bystander behavior in bullying: A multilevel analysis. *Child Development, 83*, 1917–1931. <https://doi.org/10.1111/j.1467-8624.2012.01831.x>

- Pronk, J., Goossens, F. A., Olthof, T., De Mey, L., & Willemen, A. M. (2013). Intervention strategies in case of victimization by bullying: Social cognitions of outsiders versus defenders. *Journal of School Psychology, 51*, 669–682. <https://doi.org/10.1016/j.jsp.2013.09.002>
- Pronk, J., Lee, N. C., Sandhu, D., Kaur, K., Kaur, S., Olthof, T., & Goossens, F. A. (2017). Associations between Dutch and Indian adolescents' bullying role behavior and peer-group status: Cross-culturally testing an evolutionary hypothesis. *International Journal of Behavioral Development, 41*, 735–742. <https://doi.org/10.1177/0165025416679743>
- Pronk, J., Olthof, T., & Goossens, F. A. (2015). Differential personality correlates of early adolescents' bullying-related outsider and defender behavior. *Journal of Early Adolescence, 35*, 1069–1091. <https://doi.org/10.1177/0272431614549628>
- Pronk, J., Olthof, T., & Goossens, F. A. (2016). Factors influencing interventions on behalf of victims of bullying: A counterfactual approach to the social cognitions of outsiders and defenders. *Journal of Early Adolescence, 36*, 267–291. <https://doi.org/10.1177/0272431614562836>
- Reijntjes, A., Vermande, M. M., Goossens, F. A., Olthof, T., Van der Schoot, R., Aleva, E. A., & Van der Meulen, M. (2013). Developmental trajectories of bullying and social dominance in youth. *Child Abuse and Neglect, 37*, 224–234. <https://doi.org/10.1016/j.chiabu.2012.12.004>
- Reijntjes, A., Vermande, M. M., Olthof, T., Goossens, F. A., Aleva, E. A., & Van der Meulen, M. (2016). Defending victimized peers: Opposing the bully, supporting the victim, or both? *Aggressive Behavior, 42*, 585–597. <https://doi.org/10.1002/ab.21653>
- Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2011). Victims and their defenders: A dyadic approach. *International Journal of Behavioral Development, 35*, 144–151. <https://doi.org/10.1177/0165025410378068>
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior, 15*, 112–120. <https://doi.org/10.1016/j.avb.2009.08.007>
- Salmivalli, C., Lappalainen, M., & Lagerspetz, K. M. J. (1998). Stability and change of behavior in connection with bullying in schools: A two-year follow-up. *Aggressive Behavior, 24*, 205–218. [https://doi.org/10.1002/\(SICI\)1098-2337\(1998\)24<>1.0.CO;2-3](https://doi.org/10.1002/(SICI)1098-2337(1998)24<>1.0.CO;2-3)
- Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behavior in bullying situations. *International Journal of Behavioral Development, 28*, 246–258. <https://doi.org/10.1080/01650250344000488>
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology, 52*, 83–110. <https://doi.org/10.1891/194589501787383444>
- Sutton, J., & Smith, P. K. (1999). Bullying as a group process: An adaptation of the participant role approach. *Aggressive Behavior, 25*, 97–111. [https://doi.org/10.1002/\(SICI\)1098-2337\(1999\)25<>1.0.CO;2-3](https://doi.org/10.1002/(SICI)1098-2337(1999)25<>1.0.CO;2-3)
- Troop-Gordon, W., Rudolph, K. D., Sugimura, N., & Little, T. D. (2014). Peer victimization in middle childhood impedes adaptive responses to stress: A pathway to depressive symptoms. *Journal of Clinical Child and Adolescent Psychology, 44*, 432–445. <https://doi.org/10.1080/15374416.2014.891225>
- Van den Berg, Y. H. M., Burk, W. J., & Cillessen, A. H. N. (2015). Identifying subtypes of peer status by combining popularity and preference: A cohort-sequential approach. *Journal of Early Adolescence, 35*, 1108–1137. <https://doi.org/10.1177/0272431614554704>
- Van den Berg, Y. H. M., & Cillessen, A. H. N. (2015). Peer status and classroom seating arrangements: A social relations analysis. *Journal of Experimental Child Psychology, 130*, 19–34. <https://doi.org/10.1016/j.jecp.2014.09.007>